

Serial No.: 10/723,058

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings of claims in the present application.

What Is Claimed is

1. (currently amended) A method of handover in a multimode mobile telecommunication network, comprising:

a) determining that a mobile terminal is in a saturated cell,

b) after the determining operation of step a), and in order which, to initiate a handover, **sending by** the network ~~sends to~~ a mobile terminal a first group of system information via a first channel associated with circuit switching services and a second group of system information via a second channel associated with packet switching services, ~~comprising the steps of:~~

ac) performing measurements at least in one neighboring cell on a basis of information contained in the second group of system information,

bd) sending to the network the measurements performed in step ac),

ec) further performing measurements at least in one further neighboring cell on the basis of the information contained in the second group of system information,

ef) further sending to the network the measurements performed in step ee), the further sending being performed in a message distinct from the sending of step bd), and

eg) initiating the procedure of handover according to the measurements performed in step ac),

wherein the network sends to the mobile terminal the first group of system information via the first channel after the performing measurements step.

Serial No.: 10/723,058

2. (previously presented) The method according to claim 1, further comprising performing measurements in a neighboring cell based on information contained in the first group of system information associated with circuit switching services.

3. (original) The method according to claim 2, wherein the telecommunication network is a GSM/GPRS network, and wherein the first channel is a BCCH channel and the second channel is a PBCCH channel.

4. (original) The method according to claim 2, wherein the telecommunication network is a UMTS network.

5. (currently amended) A mobile terminal used in a multimode mobile telecommunication network, comprising:

means for receiving by the mobile terminal from the network information that a current cell is saturated requiring performing measurements for preparing for a handover in the network,

means for performing the measurements depending either on a first group of system information sent by the network to the mobile terminal via a circuit switching channel or on a second group of system information sent by the network to the mobile terminal via a packet switching channel, the mobile terminal comprising:

means for performing measurements at least in one neighboring cell on a basis of information contained in the second group of system information,

means for sending to the network the measurements performed,

Serial No.: 10/723,058

further means for performing further measurements at least in one further neighboring cell on the basis of information contained in the second group of system information,

further means for sending to the network the further measurements performed, and

means for initiating the procedure of handover according to the measurements performed,

wherein the network is adapted to send to the mobile terminal the first group of system information via the circuit switching channel after the measurements have been performed,

wherein the network sends to the mobile terminal the second group of system information after sending the information that the current cell is saturated, and

wherein the further measurements are sent in a message distinct from the sending of the measurements.

6. (previously presented) The method according to claim 1, wherein the performing measurements step is performed immediately upon receipt of the second group of system information.

7. (previously presented) The mobile terminal according to claim 5, wherein the means for performing measurements is adapted to perform the measurements immediately upon receipt of the second group of system information.

8. (New) A handover method for a mobile terminal in a mobile communication network, comprising:

Serial No.: 10/723,058

in response to a determination that the mobile terminal is in a saturated cell, sending by to the mobile terminal packet system information via a packet switching channel, the packet system information including GPRS frequencies for neighboring cells;

performing measurements by the mobile terminal, based on the packet system information, in a first neighboring cell;

sending to the network a result of the measurements performed on the first neighboring cell;

further performing further measurements by the mobile terminal, based on the packet system information, in at least one further neighboring cell;

further sending to the network a further result of the further measurements performed on the at least one further neighboring cell, the further sending being performed in a message distinct from the step of sending to the network the result of the measurements;

initiating a handover according to the result of the measurements; and

after the step of performing measurements by the mobile terminal, the network sends to the mobile terminal circuit system information via a circuit switching channel, the circuit system information including GSM frequencies for neighboring cells.